



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 00-658-A)

PATENT

In re Application of: Shuttter et al. )  
Serial No.: 09/995,542 ) Before the Examiner: N. S. Basi  
Filed: November 28, 2001 ) Group Art Unit: 1646  
For: ATP-Binding Cassette )  
Transporter-Like Molecules )  
and Uses Thereof )

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

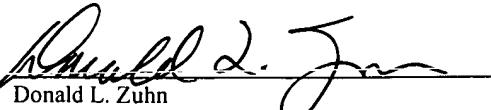
**RESPONSE TO RESTRICTION REQUIREMENT MAILED OCTOBER 6, 2004**

Responsive to the Restriction Requirement, mailed October 6, 2004, Applicants elect to prosecute claims 9, 13-17, 38-43, 47, and 48, designated as Group II by the Examiner. Applicants further elect to prosecute the polypeptide having the amino acid sequence set forth in SEQ ID NO: 5, with traverse. The basis for Applicants' traversal of the election requirement is as follows.

Applicants respectfully submit that there will be no undue hardship on the Office in performing a search with respect to polypeptides having the amino acid sequences set forth in SEQ ID NO: 5 and SEQ ID NO: 6. These amino acid sequences differ only in that the signal peptide (*i.e.*, the first 46 amino acid residues at the N-terminus) is retained in the amino acid sequence of SEQ ID NO: 5 and the signal peptide is cleaved from the amino acid sequence of SEQ ID NO: 6. These sequences otherwise share 100% identity (Appendix A; sequence alignments were performed using the application MacVector 4.5 (Accelrys, Cambridge, UK; <http://www.accelrys.com>) at the default settings). Applicants contend that because a search with respect to the amino acid sequence of SEQ ID NO: 5 or SEQ ID NO: 6 would necessarily uncover all art that is pertinent to the non-elected

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8**

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Donald L. Zuhn

sequence, there would be no undue hardship on the Office in performing a search with respect to both amino acid sequences.

Applicants also submit that there will be no undue hardship on the Office in performing a search with respect to polypeptides having the amino acid sequences set forth in SEQ ID NOs: 5, 6, and 8. Applicants note that the instant application teaches nucleic acid molecules encoding full-length and soluble human ABCL polypeptides (*i.e.*, SEQ ID NOs: 5 and 6) and a human ABCL truncation variant (*i.e.*, human ABCL1550; SEQ ID NO: 8). Applicants also note that the human ABCL truncation variant disclosed in the instant application shares 98.2% identity (1479/1506 amino acid residues) and 98.9% similarity (1490/1506 amino acid residues) with the disclosed full-length and soluble human ABCL polypeptides (Exhibit B). Applicants contend that in view of the substantial amino acid identity and similarity shared by these polypeptides, a search with respect to the amino acid sequence of SEQ ID NO: 8 would necessarily uncover all art that is pertinent to the amino acid sequence of SEQ ID NO: 5 or 6, and therefore, that there would be no undue hardship on the Office in performing a search with respect to the amino acid sequences set forth in SEQ ID NOs: 5, 6, and 8.

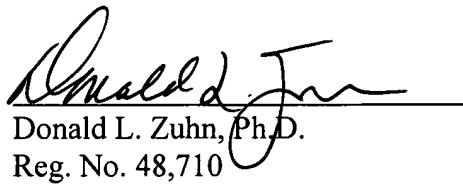
Applicants further submit that there will be no undue hardship on the Office in performing a search with respect to polypeptides having the amino acid sequences set forth in SEQ ID NOs: 2, 3, 5, 6, and 8. As described above, the instant application teaches nucleic acid molecules encoding full-length and soluble human ABCL polypeptides (*i.e.*, SEQ ID NOs: 5 and 6) and a human ABCL truncation variant (*i.e.*, human ABCL1550; SEQ ID NO: 8). The instant application also teaches nucleic acid molecules encoding full-length and soluble murine ABCL polypeptides (*i.e.*, SEQ ID NOs: 2 and 3). Applicants contend that in view of the substantial amino acid identity and similarity shared by the human and murine ABCL polypeptides (Exhibit C), one of ordinary skill in the art would clearly recognize that the full-length polypeptides set forth in SEQ ID NOs: 2 and 5, and the soluble polypeptides set forth in SEQ ID NOs: 3 and 6, are orthologs, and therefore, that there would be no undue hardship on the Office in performing a search with respect to these polypeptides.

Applicants do not believe any additional fee is required. However, the Commissioner is authorized to charge any deficiency to Deposit Account No. 13-2490. If Examiner Basi believes it to be helpful, the Examiner is invited to contact the undersigned representative by telephone at 312-913-0001.

Respectfully submitted,  
**McDonnell Boehnen Hulbert & Berghoff LLP**

Dated: November 24, 2004

By:

  
Donald L. Zuhn, Ph.D.  
Reg. No. 48,710